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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,695	10/27/2003	Kouji Ohsawa	Q78186	8678
23373	7590	03/10/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			LEE, HWA S	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,695

Applicant(s)

OHSAWA ET AL.

Examiner

Andrew Hwa S. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/27/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Relative terms such as “vertical”, “side”, and “lower” is indefinite. Is the “side portion” of claim 3 the same as a face of the wafer or the vertical surface? Also, the specification shows figures 3A and 3B where the same part number in Figure 3A that is vertical would no longer be vertical in Figure 3B. In addition to a “lower end” of Figure 3A is no longer a “lower end” in Figure 3B.

3. Claim 4, 5, 9 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation, “...gravity of the object,” does not make any sense. It is unclear how suspending force is adjusted in accordance to gravity of the object.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1, 2, 7, and 8** are rejected under 35 U.S.C. 102(b) as being anticipated by

Gardoppe et al (US 6,242,926).

With regards to claims 1 and 8, Gardoppe et al (Gardoppe hereinafter) an apparatus for moving wafers to a pair of thickness measuring probes comprising:

a supporting unit (10) capable of supporting the object in a state in which the surface is in

a substantially vertical state (zero degree); and

a moving unit (23) which moves the object in a substantially vertical direction while the

inspected surface is maintained in the substantially vertical state.

With regards to claim 2, Gardoppe shows the supporting unit (10) includes a supporting member (12) which supports a lower end of the object in the state in which the surface is in the substantially vertical state, and wherein the moving unit lifts the object until the lower end of the object is separated from the supporting member and thereafter lowers the object until the lower end of the object abuts on the supporting member at the wafer carrier box (not numbered but shows a second wafer).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Gardoppe as applied to claim 2 above and further in view of Niebling et al. (4,684,021).

Gardoppe does not show an elastic member where the lower end abuts.

Niebling et al show a bottom loading wafer carrier box having elastic resilient cushions at to support the edges of vertically held wafers to minimize wafer breakage.

At the time of the invention, one of ordinary skill in the art would have combined Gardoppe with Niebling in order to minimize wafer breakage in the carrier box.

8. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Gardoppe as applied to claims 1, 2, and 8, further in view of Glenn et al. (US 6,844,929).

Gardoppe shows all the elements as shown in claim 1, 2, and 8, but does not expressly show the details of how the wafer holder (12) clamps to the wafer.

Glenn et al. (Glenn hereinafter) show an apparatus for holding and transporting thin opaque plates comprising clamping devices that hold the peripheral edges of the wafer by at least an upper and side portions of the object. At the time of the invention, one of ordinary skill in the art would have combined Gardoppe with Glenn in order to secure the wafer from falling off the holder (12).

9. **Claims 5, 6, 9, and 10**, as understood by the examiner, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gardoppe. Gardoppe does not expressly show the forces used

to hold the wafer, however one of ordinary skill would have the skill level to use appropriate force in order to hold and lift the wafer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Hwa S. Lee whose telephone number is 571-272-2419. The examiner can normally be reached on Tue-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on 571-272-2800 ext 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrew Hwa Lee
Primary Examiner
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